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EXAMINER	
BRANDT, CHRISTOPHER M	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/764,963	ERAN, SHPAK	
	Examiner	Art Unit	
	CHRISTOPHER M. BRANDT	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21,23-48 and 50-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21,23-48 and 50-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/16/08, 5/5/08, 7/9/08, 7/19/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements submitted on 01/16/2008, 05/05/2008, 07/09/2008, and 07/18/2008 have been considered by the examiner and made of record in the application file.

Response to Amendment

This Action is in response to applicant's arguments filed on June 30, 2008. **Claims 1-21, 23-48, and 50-54** are still currently pending in the present application. **This Action is made FINAL**.

Response to Arguments

Applicant's arguments filed June 30, 2008 have been fully considered but they are not persuasive.

With regard to applicant's argument that Bajic, Melpignano, and Mangold fail to teach or suggest a response to the uplink packet is within a time limit specified by the WLAN protocol, the examiner respectfully disagrees. First of all, the examiner relied upon Bajic to disclose the manager node, which is the switch (see paragraph 90). Second of all, the examiner relied upon Mangold to show that one of ordinary skill implements time limits in WLANs. The response to the uplink packet is clearly stated by Mangold in paragraph 12, when Mangold discloses that, "If the predetermined time interval specified in the control frame is less than the interval of time before the scheduled start of the next frame, transmitting, by the AP, a data packet to the plurality of first and second stations over the wireless channel, the data packet including a shorter duration than the predetermined time period specified in the control signal". Therefore, it would

have been obvious to one of ordinary skill in the art to place this feature of Mangold's invention into the switch of Bajic.

As a result, Bajic, Melpignano, and Mangold read upon the claims as currently written.

With regard to applicant's argument that Bajic, Melpignano, and Fox fail to teach or suggest that uplink messages from the access points are received exclusively through the first port and to convey the uplink message exclusively via the second port, wherein the manager node has first and second address on the LAN, which are respectively associated with the first and second ports, and wherein the access points are adapted to convey the uplink messages over the LAN in the form of data frames directed to the first address, the examiner respectfully disagrees. As the examiner clearly noted in the previous communication, Fox states, "MxN switch is comprised of a plurality of discrete devices having different addresses and is operable to connect any of the M input ports to any of the N output ports". The input ports clearly being the uplink and the output ports clearly being the downlink. Fox may have not explicitly taught access points, however, it is clear that he showed and disclosed microwave systems (i.e. base stations) coupled to the switches (column 3 lines 28-42). Therefore, the Fox reference is relevant and the claims are written such that they read upon the cited references.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-18, 28-45 are rejected under 35 USC 103(a) as being unpatentable over **BAJIC (US PGPUB 2003/0227893 A1)** in view of **Melpignano et al. (US PGPUB 2003/0003912 A1, hereinafter Melpignano)** and further in view of **Mangold et al. (US PGPUB 2002/0093929, hereinafter Mangold)**.

Consider **claim 1 (and similarly applied to claim 28)**. Bajic discloses an apparatus for mobile communication, comprising: a switch, having a plurality of ports for connection to a wired local area network (LAN) (paragraph 52, read as all packets receive4d from mobile stations by a repeater without errors are forwarded to switch 301. Switch 301 knows which repeater sent the packet(s) because it is received on its preassigned port);

a plurality of repeaters, which are arranged in a wireless local area network (WLAN) to communicate over the air in accordance with a predefined WLAN protocol on a common frequency channel with a mobile station using a common basic service set identification (BSSID) for all the repeaters (paragraphs 45, 46, 121, read as each of the repeaters receives wireless communications from device (e.g. mobile stations) in the coverage areas of the repeaters. Although only three repeaters are shown, alternative embodiments may utilize any number of

repeaters). Receive unit filters valid received frames by destination address, and BssId for group destination addresses), and which are coupled by the LAN to the switch so that upon receiving at one or more of the repeaters an uplink signal transmitted over the WLAN by the mobile station on the common frequency channel (LAN backbone 102 also includes switch 301 which interfaces to repeaters 301_1-302_3), the one or more of the repeaters convey messages responsively to the uplink packet over the LAN to the switch (paragraph 52, read as each packet may be received by one or more repeaters. Each repeater that receives a packet from a mobile station without errors determines the received signal strength of the packet. The repeater encapsulates the packet into an Ethernet packet with the RSSI in a header and forwards the Ethernet packet to switch 301); and

a manager node, which is coupled to the switch so as to receive the messages and is adapted to process the messages so as to select one of the repeaters to respond to the uplink packet, and to send an instruction via the switch to the selected one of the repeaters to transmit to the mobile station a response to the uplink packet (paragraph 90, read as switch 301 may switch the packet to port 5, the port that associated with the communication path through repeater 302_O. Thus, mobility is supported by simply moving a packet to a different port of switch 301 that is assigned to a different repeater).

Bajic discloses the claimed invention except he fails to explicitly teach access points (Bajic teaches repeaters).

However, Melpignano discloses access points (paragraphs 59, 94-98, 111-115, 123, 126, 137, read as a wireless communications system is in the form of shard resource network 10, in

this case a Bluetooth local area network (BT LAN), and comprises a slave unit in the form of a mobile terminal MT and set of master units in the form of wireless access points AP_{1-4} connected together via the shared resource network 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Melpignano into the apparatus of Bajic in order to that signaling between the mobile terminal MT and the access points need not be the same as the manner in which the access points communicate with each other through the shared access network (paragraph 78). In addition, this technique may reduce interference (paragraph105).

In addition, Bajic and Mangold fail to disclose that a response to the uplink packet is within a time limit specified by the WLAN protocol.

However, Mangold discloses that a response to the uplink packet is within a time limit specified by the WLAN protocol (paragraph 11, read as permitting the plurality of second stations to transmit a data packet to the AP over the wireless channel, the data packet including a shorter duration than the predetermined time period specified in the control signal, where the step of permitting the plurality of second stations to transmit a data packet to the AP over the wireless channel further comprises the steps of: determining, by the AP, whether the predetermined time interval specified in the control frame is longer than an interval of time following receipt of a last frame from one of the first stations and before a scheduled start of a set of next frames from at least one of the second stations).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Mangold into the invention of Bajic and Melpignano in order to control the wireless channel within the time range to permit the plurality of stations to transmit a data packet (paragraph 11).

Consider **claim 2 and as applied to claim 1**. Bajic and Melpignano disclose wherein the access points have respective service areas, and are arranged so that the service areas substantially overlap (paragraph 50).

Consider **claim 3 and as applied to claim 1**. Bajic and Melpignano disclose wherein the access points are configured to communicate with the mobile station substantially in accordance with IEEE Standard 802.11 (paragraph 46).

Consider **claim 4 and as applied to claim 1**. Bajic and Melpignano disclose wherein the LAN is an Ethernet LAN (paragraph 48).

Consider **claim 5 and as applied to claim 1**. Bajic and Melpignano disclose wherein the LAN is characterized by a data transmission rate of at least 1 Gbps (paragraph 66).

Consider **claim 6 and as applied to claim 1**. Bajic and Melpignano disclose wherein the LAN is characterized by a data transmission rate that is substantially less than 1 Gbps (paragraph 66).

Consider **claim 7 and as applied to claim 1**. Bajic and Melpignano disclose wherein the manager node has an address on the LAN, and wherein the access points are adapted to convey

the messages over the LAN in the form of data frames directed to the address of the manager node (paragraph 52).

Consider **claim 8 and as applied to claim 7**. Bajic and Melpignano disclose wherein the access points are configured to communicate over the LAN exclusively with the manager node (paragraph 56).

Consider **claim 9 and as applied to claim 7**. Bajic and Melpignano disclose wherein the uplink packet comprises an uplink data packet sent by the mobile station using the uplink signal, and wherein the access points are configured to fragment the uplink data packet among a succession of the data frames for conveyance over the LAN via the switch to the manager node (paragraph 116).

Consider **claim 10 and as applied to claim 9**. Bajic and Melpignano disclose wherein the access points are operative to fragment the uplink data packet so that the data frames have a length that is no more than 10% of a maximum frame length permitted on the LAN (paragraph 126).

Consider **claim 11 and as applied to claim 9**. Bajic and Melpignano disclose wherein the access points are operative to fragment the uplink data packet so that the data frames have a length that is equal to a minimum frame length permitted on the LAN (paragraph 116, 117).

Consider **claim 12 and as applied to claim 9**. Bajic discloses wherein the uplink data packet comprises a destination address, and wherein the manager node is adapted to reassemble the uplink data packet from the succession of the data frames, and to convey the reassembled packet via the switch over the LAN to the destination address (paragraphs 90, 116, 117).

Consider **claim 13 and as applied to claim 12**. The combination of Bajic and Melpignano disclose wherein the manager node is connected to first and second ports among the plurality of the ports of the switch, and is configured to receive the data frames from the access points through the first port and to convey the reassembled packet to the LAN via the second port.

Consider **claim 14 and as applied to claim 13**. Bajic discloses wherein the manager node is further configured to receive a downlink data packet from the LAN via the second port, and to fragment the downlink data packet into a further succession of the data frames and to convey the further succession of the data frames via the first port to the selected one of the access points, which is operative to reassemble the downlink data packet for transmission over the WLAN to the mobile station (paragraph 116).

Consider **claim 15 and as applied to claim 9**. Bajic and Melpignano disclose wherein the address of the manager node on the LAN comprises a Layer 3 address, and wherein each of the succession of the data frames among which the uplink data packet is fragmented comprises a Layer 3 encapsulating packet, having a destination address corresponding to the Layer 3 address of the manager node (Bajic; paragraph 95, Melpignano; paragraph 114).

Consider **claim 16 and as applied to claim 1**. Bajic and Melpignano disclose wherein the messages conveyed by the access points responsively to the uplink packet comprise an indication of a strength of an uplink signal, conveying the uplink packet, received respectively by each of the one or more of the access points, and wherein the manager node is adapted to select, responsively to the indication and prior to receiving the messages from all of the one or

more of the access points, the one of the access points to respond to the uplink packet (Bajic; paragraphs 60, 61, Melpignano; paragraph 97).

Consider **claim 17 and as applied to claim 16**. The combination of Bajic and Melpignano disclose wherein the access points are adapted to set, responsively to the strength of the uplink signal, a priority indicator in the messages to be conveyed over the LAN so as to cause the switch to deliver a first message indicating a strong uplink signal before delivering a second message indicating a weak uplink signal.

Consider **claim 18 and as applied to claim 16**. Melpignano discloses wherein the access points are adapted, responsively to the strength of the uplink signal, to delay transmission of some of the messages over the LAN, so that a first message indicating a strong uplink signal is transmitted with a smaller delay than a second message indicating a weak uplink signal (paragraph 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Melpignano into the apparatus of Bajic in order to help it establish communications with base stations it has not yet encountered (paragraph 9).

Consider **claim 29 and as applied to claim 28**. Bajic and Melpignano disclose wherein the access points have respective service areas, and wherein arranging the plurality of the access points comprises arranging the access points so that the service areas substantially overlap (paragraph 52).

Consider **claim 30 and as applied to claim 28**. Bajic and Melpignano disclose wherein arranging the plurality of the access points comprises arranging the access points to communicate with the mobile station substantially in accordance with IEEE Standard 802.11 (paragraph 46).

Consider **claim 31 and as applied to claim 28**. Bajic discloses wherein the LAN is an Ethernet LAN (paragraph 48).

Consider **claim 32 and as applied to claim 31**. Bajic discloses wherein conveying the messages comprises sending the messages over the Ethernet LAN at a data transmission rate of at least 1 Gbps (paragraph 66).

Consider **claim 33 and as applied to claim 31**. Bajic discloses wherein conveying the messages comprises sending the messages over the Ethernet LAN at a data transmission rate that is substantially less than 1 Gbps (paragraph 66).

Consider **claim 34 and as applied to claim 28**. Bajic and Melpignano disclose wherein the manager node has an address on the LAN, and wherein conveying the messages comprises transmitting the messages over the LAN in the form of data frames directed to the address of the manager node (paragraph 52).

Consider **claim 35 and as applied to claim 34**. Bajic and Melpignano disclose wherein the access points are configured to communicate over the LAN exclusively with the manager node (paragraph 56).

Consider **claim 36 and as applied to claim 34**. Bajic and Melpignano disclose wherein receiving the uplink signal comprises receiving an uplink data packet sent by the mobile station, and wherein transmitting the messages comprises fragmenting the uplink data packet among a succession of the data frames for conveyance over the LAN via the switch to the manager node (paragraph 116).

Consider **claim 37 and as applied to claim 36**. Bajic discloses wherein fragmenting the uplink data packet comprises generating the data frames with a length that is no more than 10% of a maximum frame length permitted on the LAN (paragraph 126)

Consider **claim 38 and as applied to claim 36**. Bajic and Melpignano disclose wherein fragmenting the uplink data packet comprises generating the data frames with a length that is equal to a minimum frame length permitted on the LAN (paragraphs 116, 117).

Consider **claim 39 and as applied to claim 36**. Bajic discloses wherein the uplink data packet comprises a destination address, and comprising reassembling the uplink data packet at the manager node from the succession of the data frames, and conveying the reassembled packet over the LAN to the destination address (paragraphs 90, 116, 117).

Consider **claim 40 and as applied to claim 39**. The combination of Bajic and Melpignano disclose wherein the LAN comprises a switch, and the manager node is connected to first and second ports of the switch, and wherein transmitting the messages comprises transmitting the data frames from the access points through the first port to the manager node, and wherein conveying the reassembled packet comprises transmitting the reassembled packet to the LAN via the second port.

Consider **claim 41 and as applied to claim 40**. Bajic discloses and comprising: receiving at the manager node a downlink data packet from the LAN via the second port; fragmenting the downlink data packet into a further succession of the data frames; conveying the further succession of the data frames via the first port to the selected one of the access points; and reassembling the downlink data packet at the selected one of the access points for transmission over the WLAN to the mobile station (paragraph 116).

Consider **claim 42 and as applied to claim 36**. Bajic and Melpignano disclose wherein the address of the manager node on the LAN comprises a Layer 3 address, and wherein each of the succession of the data frames among which the uplink data packet is fragmented comprises a Layer 3 encapsulating packet, having a destination address corresponding to the Layer 3 address of the manager node (Bajic; paragraph 95; Melpignano; paragraph 114).

Consider **claim 43 and as applied to claim 28**. Bajic and Melpignano disclose wherein conveying the messages comprises conveying an indication of a strength of an uplink signal, conveying the uplink packet, received respectively by each of the one or more of the access points, and wherein processing the messages comprises selecting at the manager node, responsively to the indication and prior to receiving the messages from all of the one or more of the access points, the one of the access points to respond to the uplink packet (Bajic; paragraphs 60, 61, Melpignano; paragraph 97).

Consider **claim 44 and as applied to claim 43**. The combination of Bajic and Melpignano disclose wherein conveying the indication comprises setting, responsively to the strength of the uplink signal, a priority indicator in the messages to be conveyed over the LAN so

as to cause the switch to deliver a first message indicating a strong uplink signal before delivering a second message indicating a weak uplink signal.

Consider **claim 45 and as applied to claim 43**. Melpignano discloses wherein conveying the indication comprises delaying, responsively to the strength of the uplink signal, transmission of some of the messages, so that a first message indicating a strong uplink signal is transmitted with a smaller delay than a second message indicating a weak uplink signal (paragraph 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Melpignano into the apparatus of Bajic in order to help it establish communications with base stations it has not yet encountered (paragraph 9).

Claims 19-27, 46-54 are rejected under 35 USC 103(a) as being unpatentable over **BAJIC (US PGPUB 2003/0227893 A1)** in view of **Melpignano et al. (US PGPUB 2003/0003912 A1, hereinafter Melpignano)** and further in view of **Fox (US Patent 5,787,085)**.

Consider **claim 19 (and similarly applied to claim 46)**. Bajic discloses an apparatus for mobile communication, comprising:

a switch, having a plurality of ports for connection to a wired local area network (LAN) (paragraph 52, read as all packets receive4d from mobile stations by a repeater without errors are forwarded to switch 301. Switch 301 knows which repeater sent the packet(s) because it is received on its preassigned port);

a plurality of repeaters, which are arranged in a wireless local area network (WLAN) to communicate over the air with a mobile station, and which are coupled by the LAN to the switch so that upon receiving at one or more of the repeaters an uplink message transmitted over the WLAN by the mobile station (paragraphs 45, 46, 121, read as each of the repeaters receives wireless communications from device (e.g. mobile stations) in the coverage areas of the repeaters. Although only three repeaters are shown, alternative embodiments may utilize any number of repeaters). Receive unit filters valid received frames by destination address, and BssId for group destination addresses), the one or more of the repeaters convey the uplink message over the LAN to the switch (paragraph 52, read as each packet may be received by one or more repeaters. Each repeater that receives a packet from a mobile station without errors determines the received signal strength of the packet. The repeater encapsulates the packet into an Ethernet packet with the RSSI in a header and forwards the Ethernet packet to switch 301); and

a manager node, which is connected to first and second ports among the plurality of the ports of the switch, and is configured to receive uplink messages from the repeaters through the first port and to convey the uplink message via the second port over the LAN to respective destination addresses of the message (paragraph 90, read as switch 301 may switch the packet to port 5, the port that associated with the communication path through repeater 302_O. Thus, mobility is supported by simply moving a packet to a different port of switch 301 that is assigned to a different repeater).

Bajic discloses the claimed invention except he fails to explicitly teach access points (Bajic teaches repeaters).

However, Melpignano discloses access points (paragraphs 59, 94-98, 111-115, 123, 126, 137, read as a wireless communications system is in the form of shard resource network 10, in this case a Bluetooth local area network (BT LAN), and comprises a slave unit in the form of a mobile terminal MT and set of master units in the form of wireless access points AP_{1-4} connected together via the shared resource network 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Melpignano into the apparatus of Bajic in order to that signaling between the mobile terminal MT and the access points need not be the same as the manner in which the access points communicate with each other through the shared access network (paragraph 78).

In addition, Bajic and Melpignano fail to disclose that uplink messages from the access points are received exclusively through the first port and to convey the uplink message exclusively via the second port, wherein the manager node has first and second address on the LAN, which are respectively associated with the first and second ports, and wherein the access points are adapted to convey the uplink messages over the LAN in the form of data frames directed to the first address.

However, Fox discloses that uplink messages from the access points are received exclusively through the first port and to convey the uplink message exclusively via the second port, wherein the manager node has first and second address on the LAN, which are respectively associated with the first and second ports, and wherein the access points are adapted to convey the uplink messages over the LAN in the form of data frames directed to the first address

(column 2 lines 10-30, read as the MxN switch is comprised of a plurality of discrete devices having different addresses and is operable to connect any of the M input ports (i.e. uplink) to any of the N output ports (i.e. downlink)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Fox into the invention of Bajic and Melpignano in order to provide optimization of data transfer between locations or devices (column 1 lines 61-67).

Consider **claim 20 and as applied to claim 19**. Bajic and Melpignano disclose wherein the access points are configured to communicate over the LAN exclusively with the manager node via the first port in response to uplink messages received from the mobile station (paragraph 56).

Consider **claim 21 and as applied to claim 19**. Bajic and Melpignano disclose wherein the access points are configured to communicate with the mobile station substantially in accordance with IEEE Standard 802.11 (paragraph 46).

Consider **claim 23 and as applied to claim 19**. Melpignano discloses wherein the uplink message comprises a data packet, and wherein the access points are adapted to fragment the uplink data packet among a succession of the data frames for conveyance over the LAN to the first address, and wherein the manager node is adapted to reassemble the data packet from the succession of the data frames, and to convey the reassembled data packet via the second port over the LAN to the destination address, using the second address as a source address (paragraph 126).

Consider **claim 24 and as applied to claim 23**. Bajic and Melpignano disclose discloses wherein the access points are operative to fragment the data packet so that the data frames have a length that is no more than 10% of a maximum frame length permitted on the LAN (paragraph 126).

Consider **claim 25 and as applied to claim 23**. Bajic and Melpignano disclose wherein the access points are operative to fragment the data packet so that the data frames have a length that is equal to a minimum frame length permitted on the LAN (paragraphs 116, 117).

Consider **claim 26 and as applied to claim 23**. Bajic and Melpignano disclose wherein the address of the manager node on the LAN comprises a Layer 3 address, and wherein each of the succession of the data frames among which the uplink data packet is fragmented comprises a Layer 3 encapsulating packet, which is addressed to the Layer 3 address of the manager node (Bajic; paragraph 95, Melpignano; paragraph 114).

Consider **claim 27 and as applied to claim 19**. The combination of Bajic and Melpignano disclose wherein the manager node is further configured to receive a downlink message from the LAN via the second port, and to convey the downlink message via the first port to one of the access points, which is operative to transmit the downlink message over the WLAN to the mobile station.

Consider **claim 47 and as applied to claim 46**. Bajic and Melpignano discloses wherein arranging the plurality of the access points comprises configuring the access points to communicate over the LAN exclusively with the manager node via the first port in response to uplink messages received from the mobile station (paragraph 56).

Consider **claim 48 and as applied to claim 46**. Bajic and Melpignano disclose wherein arranging the plurality of the access points comprises arranging the access points to communicate with the mobile station substantially in accordance with IEEE Standard 802.11 (paragraph 46).

Consider **claim 50 and as applied to claim 46**. Bajic and Melpignano discloses wherein the uplink message comprises an uplink data packet, and wherein passing the uplink message comprises fragmenting the upstream data packet among a succession of the data frames for conveyance over the LAN to the MAC address, and wherein conveying the uplink message comprises reassembling the data packet from the succession of the data frames, and conveying the reassembled packet via the second port over the LAN to the destination address, using the second address as a source address (paragraph 126).

Consider **claim 51 and as applied to claim 50**. Bajic discloses wherein fragmenting the uplink data packet comprises generating the data frames with a length that is no more than 10% of a maximum frame length permitted on the LAN (paragraph 126).

Consider **claim 52 and as applied to claim 50**. Bajic discloses wherein fragmenting the uplink data packet comprises generating the data frames with a length that is equal to a minimum frame length permitted on the LAN (paragraphs 116, 117).

Consider **claim 53 and as applied to claim 50**. Bajic and Melpignano discloses wherein the address of the manager node on the LAN comprises a Layer 3 address, and wherein each of the succession of the data frames among which the uplink data packet is fragmented comprises a

Layer 3 encapsulating packet, which is addressed to the Layer 3 address of the manager node (Bajic; paragraph 95, Melpignano; paragraph 114).

Consider **claim 54 and as applied to claim 46**. The combination of Bajic and Melpignano disclose and comprising: receiving at the manager node a downlink message from the LAN via the second port; conveying the downlink message via the first port from the manager node to one of the access points; and transmitting the downlink message over the WLAN from the one of the access points to the mobile station.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street

Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Brandt whose telephone number is (571) 270-1098. The examiner can normally be reached on 7:30a.m. to 5p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Christopher M. Brandt

C.M.B./cmb

October 9, 2008

/George Eng/

Supervisory Patent Examiner, Art Unit 2617